BAY AREA AIR QUALITY MANAGEMENT DISTRICT

WORKSHOP NOTICE

April 2, 2004

TO: **INTERESTED PARTIES**

FROM: **AIR POLLUTION CONTROL OFFICER**

SUBJECT: **PUBLIC WORKSHOP: PROPOSED AMENDMENTS TO REGULATION 8, RULE 8: WASTEWATER (OIL-WATER) SEPARATORS**

On **Tuesday, April 27, 2004, starting at 6:30 PM**, the staff of the Bay Area Air Quality Management District will conduct a public workshop to discuss proposed changes to Regulation 8, Rule 8: Wastewater (Oil-Water) Separators.

The workshop will be held at the following time and location:

Contra Costa County
Board of Supervisors Chambers
Room 108, 651 Pine Street
Martinez, California

6:30 PM – Discussion of Rule Proposal
8.00 PM – Discussion on Treatment System Controls

Refinery wastewater systems exist to separate and process organics entrained in water during the making of petroleum products. Water has many uses in the refining process, including crude oil washing, process unit cooling, component cooling, steam production and vessel cleaning. In the refinery, water containing organics enters into the wastewater collections system through drains in the process block. These drains feed a network of pipes that transport the wastewater in a segregated system to an onsite treatment facility. Along this piping network there are a series of manholes and junction boxes.

Wastewater gathered by the collection systems at each refinery is routed to wastewater treatment. The refinery wastewater treatment system generally consists of oil/water separation, dissolved nitrogen or dissolved air flotation units and biological treatment. There can be a host of other steps in many of the refinery wastewater treatment trains including flow equalization, pH balancing, chemical and nutrient addition.

The potential for VOC emissions from wastewater collection systems occurs when organic liquids are entrained in waters used in refinery processes. These organic liquids are volatilized during transport to an onsite wastewater treatment system by exposure to high temperatures and turbulence in the transport structures (pipes, manholes, junction boxes, sumps and lift stations). The emitted vapors collect in the headspaces of these transport structures and are passively vented to the atmosphere through uncontrolled system openings.

Currently, Regulation 8, Rule 8 controls emissions from the wastewater system. It limits organic emissions from oil/water separators and dissolved air flotation units at refinery, chemical and other plants throughout the Bay Area. It also limits emissions from sludge dewatering and slop oil vessels.

Summary of Regulatory Proposal

The major proposed amendments to Regulation 8, Rule 8 include:

- Expanding Regulation 8, Rule 8 to encompass refinery wastewater collection systems.
- Imposing a 500 ppm leak standard on wastewater collection components (process drains, trenches, manholes, junction boxes, reaches, sumps and lift stations). This will result in a decrease of emissions to the air.
- Requiring refineries to control equipment found leaking in excess of the 500 ppm standard.
- Requiring refineries to perform inspection and maintenance programs on wastewater components under the regulation.
- Requiring accurate and timely documentation of maintenance performed at facilities to ensure compliance with the 500 ppm leak standard.

This proposal is the result of Future Study Measure 9 in the 2001 Ozone Attainment Plan. Refinery wastewater collection, separation and treatment systems can span hundreds of acres. A Technical Assessment Document prepared by District and CARB staff deals with emissions from the collection portion of the wastewater system. This assessment recommended an expansion of Regulation 8, Rule 8 to encompass refinery wastewater collection systems. Throughout this process District staff staged numerous technical working group meetings that included industry, environmentalists and the Regional Water Quality Control Board. The development of the current emissions estimate was greatly dependant on the co-operation staff received from the refineries. This collaborative technical process has been highly successful and is presently continuing in an effort to assess emissions from the refinery wastewater treatment systems.

The proposed amendments to Regulation 8, Rule 8 would result in a reduction of VOC emissions of at least 1.9 tons per day, including the reduction of toxic compounds such as benzene, toluene and xylene. It is estimated that the cost-effectiveness to reduce emissions from drains, manholes, and junction box vents ranges from $1900 to $4200 per ton of VOC reduced. This is within the range of cost-effectiveness determined for other VOC control measures adopted by the District. In addition, a socioeconomic analysis and California Environmental Quality Act (CEQA) analysis will be prepared for this regulatory proposal.

The proposed rule, a draft staff report and the Technical Assessment Document are available on the District website at www.baaqmd.gov. These materials are also available by request. If you have any questions or comments concerning Regulation 8, Rule 8: Wastewater (Oil-Water) Separators, please contact Damian Breen, Air Quality Specialist II at (415) 749-5041 or dbreen@baaqmd.gov. Directions to the workshop are as follows:

From San Francisco/Oakland/Richmond

I-80 EAST towards **SACRAMENTO/VALLEJO**
Take the **Highway 4 EAST** exit towards **MARTINEZ/STOCKTON**
Take the **ALHAMBRA AVE** exit towards **MARTINEZ**
Turn **Left** on **ALHAMBRA AVE**
Turn **Right** on **ESCOBAR ST**
Turn **Right** on **PINE ST** to **651 PINE STREET**

From Vallejo/Sacramento

I-80 WEST towards **SAN FRANCISCO**
Take the **I-680** exit towards **BENICIA/SAN JOSE**
Take the **MARINA VISTA AVE** exit towards **MARINA VISTA/MARTINEZ**
Turn **Left** on **MARINA VISTA AVE**
Turn **Left** on **PINE ST** to **651 PINE STREET**

Via The County Connection (CCCTA)

108 AMTRAK/Martinez to North Concord **BART**
116 AMTRAK/Martinez to Pleasant Hill **BART**
118 AMTRAK/Martinez to Concord **BART**
108 and 118 stops along Court/Pine, 116 on Escobar